

## IN THE CLAIMS

Please amend the claims as follows:

1. (original) A wearable heart monitoring system for monitoring of a cardiac arrhythmia, said system comprising ECG sensors for providing patient heart data, a conditioning and interpreting circuitry for processing the heart data, alarm generation means for generating an alarm, characterized in that said conditioning and interpreting circuitry comprises a real-time evaluator for measuring and analyzing a histogram of a temporal distribution of an interval between successive corresponding characteristic peaks in an ECG spectrum during a plurality of successive heart cycles, the alarm generation means being arranged to generate an alarm based on the analysis of said histogram.
2. (original) A system according to claim 1, characterized in that said system further comprises an RF-link for transmitting a further alarm to a remote monitoring station.
3. (currently amended) A system according to ~~claims 1 or 2~~claim 1, characterized in that the ECG sensors are housed on an elastic belt.

4. (original) A system according to claim 3 characterized in that the system comprises electrical wiring for arranging electrical connections of the monitoring system, said wiring being integrated in the belt.

5. (original) A system according to claim 4, characterized in that a wire material has a substantially the same elasticity as a material constituting the elastic belt.

6. (original) A system according to claim 5, characterized in that said system comprises at least two electrodes.

7. (currently amended) A monitoring system according to ~~one of the preceding claims~~ claim 1, characterized in that said system further comprises a motion sensor.

8. (original) A method for alerting a patient for an substantial probability of a cardiac arrest event, said method being based on results of continuous monitoring of a cardiac activity by means of a cardiac monitoring system comprising a set of electrodes, a conditioning and interpreting circuitry and alarm generation means, characterized in that said method comprises the steps of:

- performing a continuous acquisition of data related to the cardiac activity by means of the electrodes;
- processing the data for extracting a characteristic parameter by means of the conditioning and interpreting circuitry;
- performing a classification of the extracted characteristic parameter;
- generating an alarm with alarm means in case the characteristic parameters falls within an alarm-relevant category.

9. (original) A method for alerting a patient for an substantial probability of a cardiac arrest event according to claim 8, characterized in, that an alarm with a high priority is generated in case of a sudden cardiac arrest.